MAKING A CASE FOR IMPROVED ENVIRONMENTAL HEALTH IN MONTANA SCHOOLS

Children's Health Month – October 2005
Part one in a series of three

FOR MORE INFORMATION CONTACT
Bonnie Rouse
MT DEQ
800-433-8773 (toll free)

Helena – As part of Children's Environmental Health Month activities (October 2005), the Environmental Protection Agency (EPA), the Montana Department of Public Health and Human Services (DPPHS), and Montana Department of Environmental Quality (DEQ) have prepared a series of informational articles on the topic of children's environmental health. Part one focuses on environmental health in the school setting, part two on toddler/preschool health, and part three on pre-natal/newborn health. Following is part one of the series.

Montana has 852 publicly funded schools with approximately 147,000 students and 14,000 staff members. Second only to their homes, Montana children ages five to 18 years spend more time in the school setting then any other. Unfortunately, the environmental health of the school setting often takes a back seat to other issues such as national test scores and funding. So why should we concern ourselves with the school environment? Consider these facts.

- Compared to adults, children eat proportionately more food, drink more fluids and breathe more air than adults. As a result, they are exposed to more pollutants per pound of body weight than adults.
- Children may be more vulnerable than adults to environmental hazards because their systems are still developing, often making them less able to metabolize, detoxify and excrete toxins.
- Fewer than half of the synthetic chemicals that have been developed and released to the environment have been tested for potential human toxicity, fewer still, for their potential effects on children.
- Children's behavior patterns increase their exposure to potential toxics.
- And most importantly, children are least able to protect themselves and depend on others for their safety.

Obviously, some environmental improvements such as improved air handling systems cost a lot of money but many school improvements can be made by thoroughly analyzing the school environment and developing/implementing a program for continual improvement of problem areas. Probably the most achievable approach to improving the environmental health of the school setting is to "Strive to be Toxic-Free!" This approach involves inventorying and assessing the safety and health of the school environment and setting priorities for improvement. Questions to ask include: What chemicals are on site? Is it

appropriate to have these chemicals in a school? When and how are they being used? Consider the chemistry labs – does the current inventory only contain chemicals that are currently used in the classroom? What about the art rooms and shop classes? Take it a step further, what is in the janitorial closet and what about the nurse's station? Look outside - what types of fertilizers and pesticides/herbicides are being applied to the surrounding grounds?

If you want to learn more, additional assistance and information is available! For anyone interested in the environmental health of schools, the Environmental Protection Agency (EPA) has developed an informational hub dedicated to this topic, please see http://cfpub.epa.gov/schools/index.cfm Topics included in this hub are Chemical Use & Management; Design, Construction & Renovation; Energy Efficiency; Environmental Education; Facility Operations & Maintenance; Indoor Air Quality; Outdoor Air Quality; Safety Preparedness; Waste Reduction; and Water Quality. Closer to home, the Montana Department of Environmental Quality (DEQ) has initiated a school chemical cleanout program focusing on the elimination of elemental mercury and hazardous waste in schools. As part of this initiative; in September 2005, DEQ's Hazardous Waste Program conducted nine one-day chemical safety/environmental training events for Montana science teachers. Additionally, DEQ's Business & Community Assistance Program is offering a limited amount of funding for conducting chemical clean-outs. For more information on funding, or to request assistance with developing a chemical management program – please contact Bonnie Rouse of DEQ's Business & Community Assistance program at 1-800-433-8773 or brouse@mt.gov . Additional information can also be found on DEQ's school lab website http://www.mdeqschoollabs.com/index.asp .